## NEW AND RARE BRITISH FUNGI.

## By WM. PHILLIPS AND CHARLES B. PLOWRIGHT.

(WITH PLATES 24 AND 25.)

We propose in this and subsequent papers to record the occurrence of such species of fungi not hitherto found in Britain as may come under our own immediate notice; also the occurrence in new localities of some of the rarer British species, which have already appeared in the invaluable series of papers by Messrs. Berkeley and Broome, in the "Annals and Magazine of Natural History."

1. Diplodia Syringæ. And. Fckl. Symb. Mycol., p. 395. Cooke's exs., Cent vii.

On Syringa vulgaris. Shrewsbury.

- 2. Ramularia armoraciæ. Fekl. Symb. Mycol., p. 361. men Herb. Mycol. Æconom., No. 27. On the leaves of horseradish. North Wootton, June, 1873.
- 3. Ascochyta armoraciæ. Fekl. Symb. Mycol., p. 388. Thümen Herb. Mycol. Æconom., No. 23. Cooke, Exs., Cent vii.

On horseradish leaves, North Wootton, Sept., 1874. Obviously

a more advanced condition of the preceding.

- \* Thecaphora hyalina. Fing. On the fruit of Convolvulus sepium. King's Lynn. Dr. J. Lowe. C. B. P.
- · 4. Helminthosporium arundinaceum. Corda. Ic. III. 10, tab. 2, fig. 25. Fekl. Symb. Myeol., p. 354.

On the leaves of Phragmites communis. King's Lynn, August,

1873, abundantly. Cooke, Exs., Cent vii.

Peziza (Phialea) Stzobilina, Fr., S.M. II., p. 125. Rabh. F. E., 222.
 Krst. Pez. Asc., p. 30. Nyl. Pez. Fenn., p. 41.

Pyriform, firm, cupula concave, pallid, rufescent, margin tumid,

entire; stipes short, black.

Sporidia oblong or fusiform, simple, 0,008-0,012 × 0,0025 millim. Nyl.

On fir cones. Derbyshire. (Mr. J. Renny.) North Wootton. C. B. P.

\* Ascobolus viridis. Curr. Lin. Trans. xxiv., p. 154. On a clay bank, Wrekin, Shropshire. July, 1873.

6. Ascobolus atro-fuscus, n. s. (A. viridis, Boud. Ann. Sc. Nat., 1869. x., £. 5, <math>f. 4.?)

Sessile, crowded or scattered, blackish brown, concave, then plane, margin crenulate, externally furfuraceous; asci clavate; sporidia broadly elliptical, obtuse, hyaline, then purple, at length brown, epispore granulated or verrucose; paraphyses linear, occasionally branched. Sporid.  $\cdot 001 \times \cdot 0005$ .

On a charcoal bed, the Wrekin, Shropshire. July, 1873.

We have little doubt of this being the same plant as that referred by M. Boudier (l. c.) to A. viridis, Curr.; it differs, however, so much in sporidia, colour, and habitat, from Mr. Currey's species that we venture to consider it distinct.

Plate 24, fig. 1. a. plants nat. size; b. section of one enlarged;

c. ascus and paraphyses magnified; d. sporidia.

\* Ascophanus carneus. Var. Cuniculi. Boud. Ann. Sc. Nat., 1869, t. 12, f. 39.

This differs from the normal form in its dirty-orange or orangeflesh colour, rather smaller—size, paraphyses always colourless, and growing on rabbits' dung. Sporid. '0006 × '0004.

Near Shrewsbury, Dec., 1873.

7. Cenangium Laricinum. Fckl.

Pycnidia. Cenangium bullatum. Alb. and Schw. Consp., p. 344.

c. Pinastri, b. monstrosum, Fr. Sys. M. ii., p. 184.

Cupula round, closed, then perforated, black, rugulose, stylospores long, filiform, slender, curved.

Ascophore. Fckl. Sym. Myc., p. 270.

Scattered or cæspitose, as in *Cen. Pinastri*, but totally black; asci filled with spermatia-like corpuscules.

On larch poles. Near Shrewsbury. Nov., 1873.

8. Sphæria (Sordaria) discospora. Awd.—Perithecia scattered, minute, globose, with an obtusely conical ostiolum, covered by dense, black, short, rigid setæ, asci cylindrical, somewhat truncate at the apex, sporidia involved in mucus, subrotund discoid, dark-brown or black, '012 m.m. ('0004 in.) in diameter, '003 '005 m.m. ('001 in.) thick. Niessl. Beiträge der Pilze., p. 42. T. vi., fig. 44. Fckl. Symb. Mycol. Nachträg II., p. 43. Winter. Deutsch Sord., p. 19, t. vIII., f. 8.

On rabbits' dung. North Wootton. Dec., 1873. Known im-

mediately by its disc-shaped sporidia.

Plate 25, fig. 2. a. plant magnified; b. asci and paraphyses, more highly magnified; c. sporidia separated from the ascus with their mucus envelope.

9. Sphæria (Sordaria) breviseta. Rbh. These two species Sphæria (Sordaria) conica. Fekl. have been united by Herr Winter in his monograph of Sordaria, as species and variety (coronata) of De Bary's Sordaria curvula. Not having seen authentic specimens, we think it best simply to record their occurrence without binding ourselves to any generic name. It is worthy of remark, however, that the presence or absence of one or both the appendages, even in the same perithecium, is liable to considerable variation. Appended is a list of references bearing upon the plants in question: -Sordaria curvula, De Bary. Morphol. der Pilze. p. 209; Spharia fimiseda (De Not.), Fckl., Fung. Rhen., No. 2037; Sordaria appendiculata, Awd.; Cercophora conica, Fekl. Symb. Mycol., p. 245 & 243 (Sub. Malinvernia breviseta, Fekl.); Ixodiopsis fimicola, Kars., Fungi Fenn., No. 955; Schizothecium fimicolum, Corda, Icones, t. 11., p. 29; Hedwigia, No. 11, 1873. Winter, Deutschen Sordarien, p. 38, tab. XI., fig. 22.

10. Sphæria carbonaria. n. s.

Crowded, globose, semi-immersed, having an obtuse rugulose ostiolum, clothed at the base with branched septate hyaline threads; asci cylindrical, commonly truncate at the apex; sporidia almondshape, dark-brown, with a very short hyaline tail, uniscriate; paraphyses linear. Sporid. 0009 × 0003.

On burnt ground, near Shrewsbury, 1873. This appears to be allied to S. rotula, Cooke.

Plate 25, fig. 3. a. perithecia in the ground, magnified; b. asci and paraphyses; c. sporidia; d. mycelium clothing the base of the perithecia.

11. Sphærella Iridis. Gon. & Rabh. Myc. Eur. t. 5. f. 71.

Amphiginous, black, at first covered by the epidermis, then somewhat free, scattered, depresso-globose, pierced with a simple minute pore; asci obovate-oblong, attenuated at the base into a short stem, sporidia 8, subtriseriate, oblong, rounded at the ends, straight, uniseptate, not constricted at the septum, epispore thick, 17 × 4-5 mic. On dead leaves of *Iris pseudacorus*. Near Shrewsbury, Nov. 1873.

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12. Sphæria (Delitschia) Winteri. n. s.
Perithecia immersed, spherical, black; ostiolum elongated, cylindrical, tuberculose, rugulose, frequently somewhat curved; asci cylindrical, octosporous. Sporidia involved in mucus, uniseptate, black-brown, elliptical.

On rabbits' dung. North Wootton, Dec., 1873.

The perithecia are completely immersed in the matrix, only the tip of the ostiola being visible. The sporidia are at first greenish-yellow, then clear brown, becoming eventually almost black, when young surrounded by a gelatinous envelope, which subsequently disappears. They exhibit a tendency to fall in halves at the septum, 1003 in. long by 1001 in. wide (1062 m.m.-1028 m.m.).

Dr. George Winter, to whom specimens were submitted, considers it distinct from all its allies, and adds, "it approaches nearest

to D. chætomoides, Karst., Fungi Fennici. Exs.

Plate 25. a. perithecia enlarged; b. ascus and sporidia; c. three sporidia.

13. Cucurbitaria Dulcamaræ. Fr. Fuckel Symb. Mycol., p. 175, Fr. S. V. S. p. 391.

Sphæria dulcamaræ, Kunze & Schm., Myc. Heft. i., p. 62.

Sphæriacei Brit. Cent. ii. (inedit.)

On dead stems of Solanum dulcamara, in company with a Hendersonia, which doubtless bore some connexion with it, as a secondary form of fructification.

King's Lynn, Jan., 1874.

\* Stemonitis pulchella. Bab. Cooke's "Handbook," No. 1160. Church Stretton, Salop, Dec., 1873.

\* Peziza pustulata. Pers. Cooke's "Handbook," No. 1986. Sporidia .0006 × .0003. Tips of asci bright-blue with iodine. On charcoal beds, the Wrekin, Salop, 1873.

Plate 24, fig. 2, asci, paraphyses and sporidia, magnified.

\* P. Saniosa. Schrad. Cooke's "Handbook," No. 1991.

The hymenium when wounded exudes a purple juice. The tips of the asei become blue with iodine. Sporidia 0006 × 0003, with two or more nuclei.

This species is of very rare occurrence; one specimen only was

found near the Wrekin, Salop, July, 1873.

Plate 24, fig. 3. Nat. size of plant with section; fig. 2 f., ascus, paraphyses and sporidia.

## GLYPHOMITRIUM DAVIESII.

Several years ago I took a deep interest in this moss and its distribution in Scotland. As the fruiting period occurs in May and June, I wish to draw the attention of bryologists more imme-

diately to it.

In Wilson's "Bryologia" three stations were recorded—one each in England, Scotland, and Ireland—all of which were in the neighbourhood of the sea. Since then a considerable addition has been made to the Scotch habitats. The original station of Hooker and others had been either overlooked or neglected at Bowling. At the suggestion of Mr. Roger Hennedy, Lecturer on Botany to Anderson's University, Glasgow, we visited and found the station in May, 1863. An inspection of the place led to similar localities in the West here being visited with very satisfactory results, proving that it is much more widely distributed than was at first supposed. Our stations are now as follows:—

1.—Bowling, May, 1863, Messrs. Galt and McCartney.

2.—Whangie, New Kilpatrick, May, 1863, Messrs. McKinlay and Shaw.

3.—Killin, Perthshire, Mr. Alex. McKinlay.

4.—Ardtun, Mull, May, 1864, Mr. Donald Black, Iona, by request of Messrs. Galt and McCartney.

5.—Skye, 1864, Mr. G. E. Hunt, Manchester; and again in

1866 by Dr. John Shaw.

6.—Blairlogie, Stirlingshire, June, 1865, Mr. Geo. Thomson.

7.—Craigallion, Stirlingshire, March, 1868, Messrs. Thomson and Galt.

8.—Crags, near Strathblane, Campsie Hills, March, 1868, by Messrs. Thomson and Galt.

This interesting moss has thus been found in the counties of Dunbarton, Argyle, Inverness, Perth, and Stirling. The attention of bryologists in other parts of the country should be specially directed to fallen basaltic rocks, and more immediately to those bared ones that are not overrun with other mosses.